ABSTRACT

This invention provides a DDR type zeolite membrane, characterized in that it is formed as a membrane on a substrate and its main component is silica, and that each single gas permeance at room temperature and 100°C are different, respectively among at least two types of gases selected from a group consisting of carbon dioxide (CO_2), hydrogen (H_2), oxygen (O_2), nitrogen (N_2), methane (CH_4), normal butane (n-C_4H_{10}), isobutane (i-C_4H_{10}), sulfur hexafluoride (SF_6), ethane (C_2H_6), ethylene (C_2H_4), propane (C_3H_8), propylene (C_3H_6), carbon monoxide (CO), and nitrogen monoxide (NO).